

Kounis syndrome: acute coronary syndrome caused by hornet sting: a case report

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Introduction: Kounis syndrome (KS) represents acute coronary syndrome (ACS) caused by mast cell activation and release of inflammatory cytokines due to allergic or even anaphylactic reaction. KS is classified in three types depending on mechanism of onset of the acute coronary syndrome: vasospastic allergic angina (type I), allergic myocardial infarction (type II) and stent thrombosis (type III).¹ There are numerous examples of KS caused by iodine contrast during radiographic procedures, while it can also be caused by insect stings such as hornet.

Case report: We report the case of 51-year-old male patient with common cardiovascular risk triade (diabetes melitus type II, arterial hypertension and hyperlipidemia) who presented with acute antero-septolateral ST elevation myocardial infarction (STEMI) in clinical setting of anaphylactic reaction caused by hornet's sting followed by intramuscular application of epinephrine in emergency department. Acute thrombotic occlusion of proximal left anterior descent (LAD) artery was confirmed by urgent coronarography therefore thromboaspiration and consequently implantation of drug-eluting stent in culprit lesion was committed. Before stent implantation, tirofiban was applied intracoronary due to TIMI II flow at control coronarogram following the thromboaspiration. We also used Intravascular Ultrasound (IVUS) to evaluate vessel size due to ectasis and underlying atheromatous plaque.

Conclusion: The presence of underlying atheromatous coronary artery disease during coronarography suggests type II variant of the KS. Allergic symptoms and concomitant ACS following hornet sting is highly suggestive for KS which should be recognised and promptly treated.

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LITERATURE

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